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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
GILBERT, WILLIAM V	

ART UNIT	PAPER NUMBER
3635	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/720,473	PLOOKSAWASDI, SUNTISUK	
	Examiner	Art Unit	
	William V. Gilbert	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *14-21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is a Final Office Action. Claims 1-21 are pending. Claims 14-21 remain withdrawn. Claims 1-13 are examined below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowmer (U.S. Patent No. 5,411,347).

Claim 9: Bowmer discloses a threaded deformed reinforcing bar comprising a core (Fig. 2: proximate 12) and a transversely extending rib (threads, proximate 16) and at least one longitudinally extending rib (15, proximate "T" below) intersecting the transverse rib at multiple areas (see proximate 17; "X" below) and interrupting said pattern of threads along said bar in at least a first section of the bar ("Y" below) and the rib is absent form a second section ("Z" below) adjacent at least one end of the bar where the pattern of threads, which is

formed by the transverse ribs and the second section, is unobstructed, and an internally threaded member having an internal thread sized to receive the transverse ribs can be threaded onto the pattern of threads which is formed by the transverse ribs in the second section.

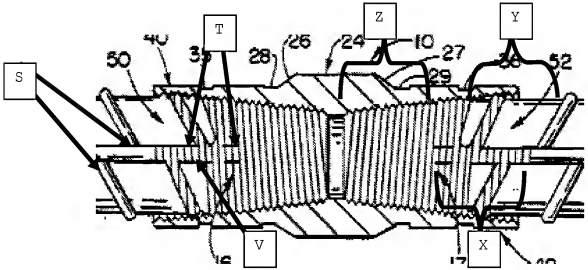

Figure 2 from Bowmer

Claim 10: the transverse rib is a continuous spiral along the bar (it is continuous along the bracketed portion "Z" above.)

Claim 11: the core has a substantially circular cross-section (as shown in the drawings.)

Claim 12: the transverse rib includes at least two series of discontinuities (see "V" above and where the second longitudinal rib would be located on the opposite side of the core) extending longitudinally along the bar and one longitudinal rib extends along each of the discontinuities (proximate "V".)

Claim 13: the transverse and longitudinal ribs are integral with each other and with the core (see Fig. 2, generally.)

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tani (U.S. Patent No. 4,056,911).

Claim 1: Tani disclose a deformed reinforcing bar to be used with concrete comprising a core (Fig. 7: 11) a series of transverse ribs (12) aligned and spaced along the bar and separated by troughs (see "A" from attached Fig. 16 from Tani, below), each series separated transversely from a adjacent series by a longitudinally extending gap (see "B" from attached Fig. 7 from Tani, below), where the series of ribs form a pattern of threads along the bar, a longitudinally extending rib (13a) in the gap, interrupted adjacent at least one end of the bar (the longitudinal rib ends where the bar ends) such that the longitudinal rib defines discontinuous sections in the troughs (see 16a generally) whereby an internally threaded member may be threaded onto the pattern of threads which is formed by the transverse ribs and the longitudinal rib does not compromise the pattern of threads. While Tani discloses a series of transverse ribs, it does not disclose at least two series of transverse ribs. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of

duplication of parts to have this limitation because duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669 (CCPA 1960). See MPEP §2144.04.

Figure 16a from Tani

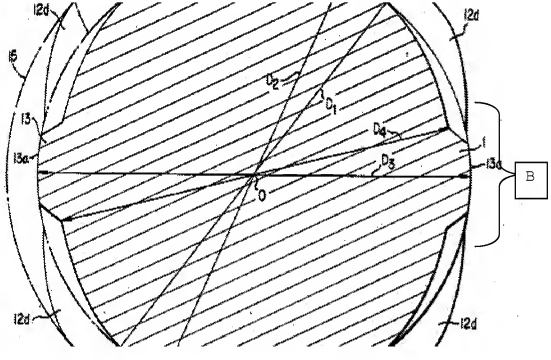

Figure 7 from Tani

Claim 2: the core has a substantially circular cross section. While noted that the Tani reference discloses a non-circular member, the examiner contends that as shown in the drawings, "non-circular" and "substantially circular" are synonymous.

Claim 3: the transverse ribs and longitudinal ribs are integral with each other at the intersection of the ribs (via portion 14).

Claim 4: the ribs are integral with the core (as shown in the drawings.)

Claims 7 and 8: the limitation "sheared off" is drawn to method steps and only the final product (the longitudinal and transverse ribs) is provided patentable weight.

Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowmer (U.S. Patent No. 5,411,347) in view of Finsterwalder (U.S. Patent No. 3,561,185).

Claim 1: Bowmer discloses a threaded deformed reinforcing bar comprising a core (12) a series of transverse ribs (16) on the core, the ribs are spaced longitudinally along the bar and separated by troughs (portion between the rib, see above) and a longitudinally extending rib (15) extending in a gap (the gap

exists between ribs; "S" from attached Fig. 2 from Bowmer, above) the longitudinal rib interrupted adjacent at least on end of the bar (as shown in Fig. 2) such that the longitudinal rib defines discontinuous sections in the troughs ("T" above), whereby an internally threaded member having an internal thread sized to receive the transverse ribs can be threaded onto the pattern of threads and the longitudinally extending rib to not comprise the pattern of threads. Bowmer does not disclose at least two series of transverse ribs. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of duplication of parts to have this limitation because duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669 (CCPA 1960). See MPEP §2144.04. Further, Bowmer does not disclose a gap in the transverse ribs. Finsterwalder discloses a reinforcing rod with a series of ribs that has a gap between the sections of transverse ribs (e.g. Fig. 4: 2). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the gap in the ribs because the ribs are functionally equivalent and would perform equally as well. Further, the gap in the threads also aids in ease of attachment of threaded members.

Claim 5: the longitudinally extending rib is interrupted by the absence of the longitudinal ribs in the trough (as shown in Bowmer, the longitudinal rib is absent in a portion of the transverse threads indicated as "Z" above.

Claim 6: the longitudinally extending rib terminates at a point spaced form at least one end of the bar (as shown in Bowmer.)

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection as applicant amended the claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mulholland (U.S. Patent No. 4,584,247);

Russwurm (U.S. Patent No. 4,922,681);

McDowell (U.S. Patent No. 4,303,354);

Kern (U.S. Patent No. 4,137,686).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS**

ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. V. G./
Examiner, Art Unit 3635
/Basil Katcheves/
Primary Examiner, Art Unit 3635